

**REMARKS**

This Amendment, submitted in response to the Office Action dated November 16, 2007, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested

Claims 1-16 are all the claims pending in the application.

**I. Rejection of claims 1 and 13 under 35 U.S.C. § 103**

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Aweva et al. (U.S. Patent No. 6,894,974; hereinafter “Aweva”) in view of Hayakawa (U.S. Patent No. 5,042,029; hereinafter “Hayakawa”).

Claim 1 recites, *inter alia*:

a multiplexer for multiplexing and transmitting to the transmitter the response signals transmitted from the receiver, and transmitting the transmitted data packets from the transmitter to a corresponding receiver, **the multiplexer provided with a queue status monitor for monitoring a queue status of at least one of the transmitted data packets and the response signals, and a congestion control adjuster for instructing the receiver to hold or compress the response signals based on the monitored queue status.**

The Examiner asserts that multiplexer 50 of Aweva teaches the claimed multiplexer. However, the multiplexer 50 does not include the q monitor 84 (queue status monitor as cited by the Examiner). The q monitor 84 is part of the processor circuit 60 and not the multiplexer 50. Therefore, the multiplexer 50 of Aweva is not provided with a queue status monitor, as claimed.

On page 12 of the Office Action, the Examiner asserts that the queue status monitor is not an integral part of the multiplexer. Applicant submits that the communication system of claim 1 comprises a transmitter, at least one receiver, and a multiplexer. As recited in claim 1, the

multiplexer is provided with a queue status monitor and a congestion control adjuster. It would be clear to a person of skill in the art when reading claim 1 that the multiplexer is provided with the queue status monitor and the congestion control adjuster. As indicated above, Aweva does not teach that multiplexer 50 is provided with the q monitor 84, which is apparent upon viewing Fig. 2 of Aweva.

The Examiner concedes that Aweva does not teach the claimed congestion control adjuster and cites Hayakawa, col. 1, line 56-68, to cure the deficiency. The aspect of Hayakawa cited by the Examiner discloses a congestion control method in which packets are sent from a source terminal in response to an acknowledgement packet from a destination terminal signaling correct receipt of previous packets from the source terminal. The method detects if traffic congestion occurs in the system and introduces a delay between receipt of an acknowledgement packet by the system from the destination terminal and subsequent transmission of the acknowledgement packet from the system.

However, Hayakawa appears to merely disclose detecting if traffic congestion occurs in the system and if traffic congestion occurs, then a delay is introduced between receipt of an acknowledgement packet by the system from the destination terminal and subsequent transmission of the acknowledgement packet from the system. There is no teaching or suggestion that a congestion control adjuster for instructing the receiver to hold or compress the response signals is based on a monitored queue status, as claimed. In addition, there is no teaching or suggestion that a multiplexer is provided with a congestion control adjuster.

Therefore, assuming Hayakawa could be combined with Aweva, the combination would not teach all of the claimed elements. Consequently, claim 1 and its dependent claims should be deemed allowable.

## **II. Rejection of claims 2, 4-5, 7-11 and 13-16 under 35 U.S.C. § 103**

Claims 2, 4-5, 7-11 and 13-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayakawa in view of Aweva as applied to claim 1, and further in view of Guttman et al. (U.S. Patent No. 7,031,259; hereinafter “Guttman”).

To the extent independent claims 7 and 13 recite subject matter similar to claim 1, they should be deemed allowable for at least the same reasons. Claims 2, 4-5, 8-11, and 14-16 should be deemed allowable by virtue of their dependency to claims 1, 7 and 13 for at least the reasons set forth above. Moreover, Guttman does not cure the deficiencies of Hayakawa and Aweva.

### **Claim 4**

Claim 4 recites “wherein the congestion control adjuster instructs the corresponding receiver to compress the response signals if the queue status of the monitored data packets is under a first threshold and over a second threshold.” The Examiner asserts that Hayakawa discloses this aspect of the claim. Specifically, the Examiner asserts that the packet switching communications system of Hayakawa discloses a predefined threshold value, citing col. 3, lines 31-41 in support.

The aspect of Hayakawa cited by the Examiner discloses:

“A congestion detector 15 is connected to the network 14 to detect when the traffic volume of the network 14 exceeds a predefined threshold level. Such a congestion detector is known in the art which, in a typical example, detects the traffic volume by measuring the amount of

packets processed during a unit interval of time or measuring the storage levels of buffers in the system. When this threshold is exceeded, the congestion detector 15 supplies an output signal to all of the line controllers to impose restriction on the flow of packets in a manner to be described."

However, Hayakawa appears to at most disclose a single threshold level. Therefore, Hayakawa does not teach or suggest a first threshold and a second threshold, let alone that the queue status of the monitored data packets is under a first threshold and over a second threshold. Further, there is no teaching or suggestion that a congestion control adjuster instructs a corresponding receiver to compress the response signals. For at least the above reasons, claim 4 should be deemed allowable. Further, Guttman does not cure the deficiencies of Hayakawa.

### **III. Rejection of claims 6 and 12 under 35 U.S.C. § 103**

Claims 6 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayakawa in view of Aweva as applied to claims 1 and 7, and further in view of Norrell et al. (U.S. Patent No. 6,853,637; hereinafter "Norrell"). Claims 6 and 12 should be deemed allowable by virtue of their dependency to claims 1 and 7 for at least the reasons set forth above. Moreover, Norrell does not cure the deficiencies of Hayakawa and Aweva.

### **IV. New Claims**

Applicant has added claims 17-19 to provide a more varied scope of protection. Claims 17 and 18 should be deemed allowable by virtue of their dependency to claim 1 for at least the reasons set forth above. Claim 19 describes subject matter similar to claim 1 but the congestion control adjuster is directed to only compressing the response signals based on the monitored queue status, which Applicant does not believe is disclosed in the art cited by the Examiner. Moreover, the art cited by the Examiner does not teach the elements of claims 17 and 18.

**V. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Ruthleen E. Uy/

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

---

Ruthleen E. Uy  
Registration No. 51,361

WASHINGTON OFFICE  
**23373**  
CUSTOMER NUMBER

Date: January 25, 2008